

CLAIMS

1. An milk-coagulating enzyme exhibiting milk-coagulating activity that is produced by a bacterium of the genus *Paenibacillus* and characterized by having the following enzymatic properties:

- (1) function: having an activity of coagulating milk to form a curd;
- (2) substrate specificity: acting on κ -casein as a substrate and specifically cleaving Thr94-Met95 in the presence of calcium;
- (3) optimum pH: 6.0-7.0; and
- (4) molecular weight: 35,000-37,000 Da when measured by SDS-PAGE.

2. The enzyme according to claim 1, wherein the enzyme is salt precipitated in 50-80% saturated ammonium sulfate solution.

3. The enzyme according to claim 2, wherein the enzyme is characterized by being salt precipitated in 50-80% saturated ammonium sulfate solution, having a stable pH range of 6.0-8.0, and having a stable temperature range of 40-50°C.

4. The enzyme according to claim 1, wherein the enzyme is produced by *Paenibacillus* sp. accession number FERM P-18138.

5. A method of producing cheese using milk as raw material, that is characterized by the formation of a curd using the milk-coagulating enzyme according to any of claims 1 through 4, whey separation, and subsequent ripening.

6. A cheese-like food product that is characterized by being produced by the method according to claim 5 and using milk as the raw material and the milk-coagulating enzyme of bacterial origin.